

**CPC****COOPERATIVE PATENT CLASSIFICATION****A43D****MACHINES, TOOLS, EQUIPMENT OR METHODS FOR  
MANUFACTURING OR REPAIRING FOOTWEAR****NOTE**

In this subclass, a method of manufacturing footwear which is dependent on a distinct machine or tool, is classified in the group covering the machine or tool for the manufacture.

**Guide heading:**

**Measuring devices**  
**Lasts**  
**Tools**

**A43D 1/00**

**Foot or last measuring devices**  
**Measuring devices for shoe parts**

- A43D 1/02 . Foot-measuring devices (measuring the shape, pattern or size of the body for diagnostic purposes [A61B 5/103](#), e.g. measuring physical dimensions [A61B 5/107](#))
- A43D 1/022 .. {involving making footprints or permanent moulds of the foot }
- A43D 1/025 .. {comprising optical means, e.g. mirrors, photo-electric cells, for measuring or inspecting feet }
- A43D 1/027 .. {Shoe fit indicating devices }
- A43D 1/04 . Last-measuring devices
- A43D 1/06 . Measuring devices for the inside measure of shoes, for the height of heels, or for the arrangement of heels
- A43D 1/08 . Measuring devices for shoe parts

**A43D 3/00**

**Lasts**

- A43D 3/02 . Lasts for making or repairing shoes (making of wooden lasts [B27M 3/20](#))
- A43D 3/021 .. {for orthopaedic footwear }
- A43D 3/022 .. {comprising means, e.g. hooks, for holding, fixing or centering shoe parts on the last }
- A43D 3/023 .. {Hinge constructions for articulated lasts }
- A43D 3/024 .. {Lasts with a fore part and heel section relatively slideable to one another along an inclined line of cut }
- A43D 3/025 .. {Longitudinally expansible lasts }
- A43D 3/026 .. {Lasts for making rubber footwear or for vulcanizing rubber soles to footwear }
- A43D 3/027 .. {Lasts with exchangeable parts, e.g. for changing the form or for remodelling }
- A43D 3/028 .. {Tack retaining means for lasts }
- A43D 3/029 .. {Constructional features of the heel section }

- A43D 3/04
  - . Pneumatic lasts
  - Elastic lasts
- A43D 3/06
  - . Wedge locks for lasts
- A43D 3/08
  - . Devices for stretching special parts of shoes
- A43D 3/10
  - . Devices for removing lasts
- A43D 3/12
  - . Devices for inserting or reinserting lasts
- A43D 3/14
  - . Stretching or spreading lasts
  - Boot-trees
  - Fillers
  - Devices for maintaining the shape of the shoe ([drying of footwear A47L 23/20](#))
- A43D 3/1408
  - .. {Devices for heating or drying shoes }
- A43D 3/1416
  - .. {Boot-trees }
- A43D 3/1425
  - .. {Devices for sole stretching }
- A43D 3/1433
  - .. {Shoe-trees }
- A43D 3/1441
  - ... {spreading the width of a shoe, i.e. laterally expandable }
- A43D 3/145
  - .... {adjustable }
- A43D 3/1458
  - ..... {by a screw }
- A43D 3/1466
  - ... {stretching the length of a shoe, i.e. longitudinally expandable }
- A43D 3/1475
  - .... {adjustable }
- A43D 3/1483
  - ..... {by a screw }
- A43D 3/1491
  - ... {with means for sweaty feet, e.g. with disinfecting or deodorant means  
([cleaning of a footwear A47L 23/20](#)) }
- A43D 5/00**
  - Hand appliances or hand tools for making or repairing shoes, other than those covered by groups [A43D 15/00](#), [A43D 19/00](#), [A43D 95/00](#), [A43D 100/00](#), [A43D 117/00](#)**
- A43D 5/005
  - . {for heel removing }
- A43D 5/02
  - . Stands for making footwear ([stands for cleaning shoes A47L 23/16](#))
- A43D 5/04
  - . Knives ([knives in general B26B](#) )
- A43D 5/06
  - . Tools for cutting off the ends of nails or pegs in shoes
- A43D 5/08
  - . Awls ([making B21G](#) )
- A43D 5/10
  - . Shoe-peg rasps ([wood rasps B27G 17/06](#))
- A43D 5/12
  - . Hand nailing apparatus for shoemaking ([A43D 19/02](#) takes precedence; nailing apparatus in general [B25C](#) , [B27F](#) )
- A43D 5/14
  - .. Hand pincers for stapling

- A43D 8/00**      **Machines for cutting, ornamenting, marking or otherwise working up shoe part blanks** (pulling-over or lasting [A43D 9/00](#) to [A43D 23/00](#); making or fastening soles, heels or welts [A43D 25/00](#) to [A43D 83/00](#))
- A43D 8/003      . {specially adapted for forming upper blanks or leggings by stretching }
- A43D 8/006      . {for forming shoe stiffeners }
- A43D 8/02      . Cutting-out (cutting in general [B26D](#) , [B26F](#) ; of leather articles in general [C14B 5/00](#))
- A43D 8/04      . . Stamping-out ([A43D 8/10](#) takes precedence)
- A43D 8/06      . . . Dies therefor
- A43D 8/08      . . . Combined stamping-out and bonding, e.g. high frequency electric current being applied between cutting edge and work support
- A43D 8/10      . . Cutting-out using pattern grading (for trimming [A43D 8/38](#); pattern grading in making clothes [A41H 3/00](#); pattern copying in general [B23Q 33/00](#), [B23Q 35/00](#))
- A43D 8/12      . . . Patterns or templates therefor
- A43D 8/14      . . . . Applying bindings to pattern edges
- A43D 8/16      . Ornamentation (by creasing [A43D 8/44](#); of leather in general [C14B 1/56](#))
- A43D 8/18      . . by punching or perforating (punching for eyelet-setting [A43D 100/02](#))
- A43D 8/20      . . . Dies therefor
- A43D 8/22      . . by embossing or printing (printing per se, stamping per se [B41](#) )
- A43D 8/24      . . . Embossing using heat, e.g. high frequency electric current
- A43D 8/26      . Marking for future work ([A43D 8/16](#) takes precedence; printing per se, stamping per se [B41](#) )
- A43D 8/265      . . {Marking buttonhole locations }
- A43D 8/28      . . Patterns for drawing cut-outs (in making clothes [A41H 3/00](#))
- A43D 8/30      . . Charting sheet material for subsequent cutting
- A43D 8/32      . Working on edges or margins (of leather in general [C14B 1/02](#), [C14B 11/00](#))
- A43D 8/34      . . by skiving ([A43D 8/48](#) takes precedence)
- A43D 8/36      . . by trimming the margins of sole blanks (trimming as an intermediate operation in shoemaking [A43D 27/00](#), as a finishing operation in shoemaking [A43D 87/00](#))
- A43D 8/38      . . . by cutting-out, e.g. using templates
- A43D 8/40      . . by folding, turning in or over, hammering
- A43D 8/42      . . by singeing, contracting, dyeing
- A43D 8/44      . Creasing presses (folding on margins [A43D 8/40](#))
- A43D 8/46      . Splitting (of leather in general [C14B 1/02](#))
- A43D 8/48      . . combined with skiving
- A43D 8/50      . . Combined splitting and trimming of the heel-seat portions of sole blanks (of soles fixed to shoe bottoms [A43D 27/04](#))
- A43D 8/52      . Flexing (of leather in general [C14B](#) )

- A43D 8/54 . . by milling
- A43D 8/56 . . of sole blanks by slitting

**Guide heading:** Pulling-over or lasting

**A43D 9/00** Devices for binding the uppers upon the lasts (for the toe ends [A43D 15/00](#))

**A43D 11/00** Machines for preliminary treatment or assembling of upper-parts, counters, or insoles on their lasts preparatory to the pulling-over or lasting operations  
Applying or removing protective coverings

- A43D 11/003 . {Applying or removing protective coverings }
- A43D 11/006 . {Devices for temporarily fixing or aligning insoles on lasts }
- A43D 11/01 . Machines for applying reinforcement or ornamental straps to the margins of uppers (to soles or insoles [A43D 43/06](#))
- A43D 11/02 . . to the margins thereof
- A43D 11/03 . . Coating with thermoplastic materials to stiffen the toe or heel portion
- A43D 11/04 . Machines for seam-pressing or flattening shoe parts, quarters, or the like (on lasted shoes [A43D 55/00](#))
- A43D 11/06 . Machines for temporary buttoning of shoe parts
- A43D 11/08 . Machines for temporary lacing of shoe parts or for cutting-away the lacing strips after lasting
- A43D 11/085 . . {Lacing machines }
- A43D 11/10 . Devices for holding the lacing portions in position during lasting
- A43D 11/12 . Machines for forming the toe part or heel part of shoes, with or without use of heat
- A43D 11/14 . Devices for treating shoe parts, e.g. stiffeners, with steam or liquid (for soled shoes [A43D 95/12](#))
- A43D 11/145 . . {with means, e.g. transport chains, for continuously transferring the shoe parts through the machines }

**A43D 13/00** Machines for pulling-over the uppers when loosely laid upon the last and tacking the toe end

- A43D 13/02 . Devices for locating caps or stiffeners on pulling-over machines

**A43D 15/00** Pulling-over or lasting machines for binding the toe end with cord, string, or wire  
Machines for lasting with clamps  
Lasting machines with sewing devices, also for platform shoes (special sewing machines for leather or shoes [D05B](#) )

<b>A43D 17/00</b>	<b>Pulling-over or lasting machines with oscillating shoe supports</b>
<b>A43D 19/00</b>	<b>Hand lasting Lasting pincers</b>
A43D 19/02	. Tacking or nailing devices for use with lasting pincers
<b>A43D 21/00</b>	<b>Lasting machines</b>
A43D 21/003	. {with lasting strings, stretching straps or the like, for forming the shank portions of shoes }
A43D 21/006	. {with rotating lasting means }
A43D 21/02	. with one single lasting gripper
A43D 21/04	. for lasting the opposite sides of the shoe one after another
A43D 21/06	. for wooden soles ( <a href="#">A43D 21/16</a> , <a href="#">A43D 21/18</a> take precedence)
A43D 21/08	. with last supports and toe- or heel-embracing wipers movable both horizontally and vertically ( <a href="#">A43D 21/16</a> takes precedence)
A43D 21/10	. Bed-lasting machines
A43D 21/12	. with lasting clamps, shoe-shaped clamps, {pincers, } wipers, stretching straps or the like for forming the toe or heel parts of the last { ( <a href="#">A43D 21/16</a> , <a href="#">A43D 21/18</a> take precedence) }
A43D 21/122	.. {with pincers and clamps }
A43D 21/125	.. {with a plurality of pincers ( <a href="#">A43D 21/122</a> takes precedence) }
A43D 21/127	.. {with wipers ( <a href="#">A43D 21/16</a> , <a href="#">A43D 21/18</a> take precedence) }
A43D 21/14	. for toe or heel parts, with nailing devices
A43D 21/16	. with lasting pincers {and } toe- or heel-embracing wipers
A43D 21/163	.. {with heel-embracing wipers }
A43D 21/166	.. {with toe-embracing wipers }
A43D 21/18	. with lasting pincers and straight-acting wipers, also for forming the shank portions of shoes
<b>A43D 23/00</b>	<b>Single parts for pulling-over or lasting machines (<a href="#">nailing devices A43D 75/00</a>)</b>
A43D 23/02	. Wipers Sole-pressers Last-supports Pincers
A43D 23/022	.. {Sole-pressers }

- A43D 23/025      ..    {Last-supports }
- A43D 23/027      ..    {Pincers }
- A43D 23/04        .    Last-carriers  
                     Shoe-guides
- A43D 23/06        .    Devices for cutting-off superfluous material on the uppers or linings

**Guide heading:**      **Making or fastening soles, heels or welts, or preparing same for fastening to the shoe**  
                          **Carrying out other operations subsequent to lasting**  
                          **Turning ([sewing D05B](#) )**

#### **A43D 25/00            Devices for gluing shoe parts**

- A43D 25/047        .    Devices for lasting with adhesives or for gluing together insoles and uppers ([A43D 25/18](#), [A43D 25/20](#) take precedence)
- A43D 25/053        ..    with rotating gripping means
- A43D 25/06        .    Devices for gluing soles on shoe bottoms ([A32D 25/18](#), [A43D 25/20](#) take precedence)
- A43D 25/063        ..    {Multiple pressing devices in a closed circuit, e.g. rotating multiple pressing devices }
- A43D 25/066        ..    {Heel clamps or heel presses for glueing heels to shoe bottoms }
- A43D 25/07        ..    using flexible diaphragm pressing devices
- A43D 25/08        ..    Welt hold-down devices
- A43D 25/10        ..    Press-pads or other supports of shoe-gluing presses
- A43D 25/12        .    Devices for gluing heel-breasts to heels or for gluing coverings on heels ([A43D 25/18](#), [A43D 25/20](#) take precedence)
- A43D 25/123        ..    {Devices for glueing heel-breasts to heels }
- A43D 25/126        ..    {Devices for glueing coverings on heels }
- A43D 25/14        .    Devices for filling the shoe bottom
- A43D 25/16        .    Devices for making glued platform shoes
- A43D 25/18        .    Devices for applying adhesives to shoe parts ([A43DF25/20](#) takes precedence; [applying liquids or other fluent materials to surfaces in general B05](#) )
- A43D 25/181        ..    {by rollers }
- A43D 25/183        ..    {by nozzles }
- A43D 25/185        ..    {by imprinter plates }
- A43D 25/186        ..    {by dipping }
- A43D 25/188        ..    {by grids }
- A43D 25/20        .    Arrangements for activating or for accelerating setting of adhesives, e.g. by using heat

#### **A43D 27/00            Machines for trimming as an intermediate operation ([working on edges or margins](#),**

e.g. by trimming, of shoe part blanks [A33D 8/32](#); trimming as a finishing operation in shoemaking [A43D 87/00](#))

- [A43D 27/02](#) . Soles or heels fixed on shoe bottoms (stamps or dies for soles or heel-lifts [C14B](#) )
- [A43D 27/04](#) . . Heel-end portions of soles fixed on shoe bottoms (on loose soles [A43D 8/46](#))
- [A43D 27/06](#) . . Heel breast flaps

#### **[A43D 29/00](#) Machines for making soles from strips of material**

#### **[A43D 31/00](#) Machines for making or inserting shank stiffeners**

- [A43D 31/02](#) . Machines for making shank stiffeners
- [A43D 31/04](#) . Machines for inserting shank stiffeners

#### **[A43D 33/00](#) Machines for assembling lifts for heels (cutting-out heel lifts [A43D 8/02](#))**

- [A43D 33/02](#) . Gauges for heel lifts  
Magazines for piling up heel lifts
- [A43D 33/04](#) . Nailing machines for building the heels from lifts
- [A43D 33/06](#) . Machines for sorting heel lifts

#### **[A43D 35/00](#) Presses for shaping pre-existing loose soles, shoe bottoms or soles fixed to shoe bottoms (glueing soles on shoe bottoms [A43D 25/06](#))**

#### **[A43D 37/00](#) Machines for roughening soles or other shoe parts preparatory to gluing**

- [A43D 37/005](#) . {characterised by constructional details of the rotative tools used therewith }

#### **[A43D 39/00](#) Machines for making foot-supporting pads or instep-raisers for flat feet**

#### **[A43D 43/00](#) Machines for making stitch lips, or other preparatory treatment of soles or insoles before fixing same (flexing of soles or insoles [A43D 8/52](#))**

- [A43D 43/02](#) . for making stitch lips by cutting
- [A43D 43/06](#) . for applying reinforcing materials to insoles  
Attachment of ornamental tapes or ribs, e.g. sewing ribs, on soles, or the like

#### **[A43D 44/00](#) Machines for attaching welts or rands**

<b>A43D 47/00</b>	<b>Machines for trimming or butting welts fixed on uppers</b>
<b>A43D 49/00</b>	<b>Machines for pounding</b>
<b>A43D 51/00</b>	<b>Machines for lip-setting</b>
<b>A43D 53/00</b>	<b>Machines for trimming-off surplus material along the inseam</b>
<b>A43D 55/00</b>	<b>Machines for flattening, pressing, or rubbing the in seams of lasted shoes</b>
<b>A43D 57/00</b>	<b>Machines for attaching the welt ends</b>
<b>A43D 59/00</b>	<b>Machines for rasping the lasting-margins of shoes which are sewn through</b>
<b>A43D 61/00</b>	<b>Machines for nail-pulling, nail-cutting, or nail-detecting</b>
<b>A43D 63/00</b>	<b>Machines for carrying-out other finishing operations</b>
<b>A43D 67/00</b>	<b>Machines for fastening soles or heels by means of screws or screwed wire</b>
<b>A43D 69/00</b>	<b>Shoe-nailing machines (nailing machines in general <a href="#">B27F</a> )</b>
A43D 69/005	. {using nails being made from alternative materials, e.g. leather }
A43D 69/02	. using ready-made nails
A43D 69/04	. with apparatus for separating the nails from a wire or from a strip of metal or other material
A43D 69/06	. using ready-made staples
A43D 69/08	. with apparatus for making staples
A43D 69/10	. using ready-made wooden pegs
A43D 69/12	. with apparatus for separating the pegs from a strip of wood
A43D 69/14	. for nailing or stapling the lasted margin onto shoes with wooden soles
<b>A43D 71/00</b>	<b>Elements of nailing machines</b>
	<b>Nail-feeding devices</b>



- A43D 71/02
  - . Driving mechanisms for moving the horn
  - Nail-cutting apparatus connected with the horn
- A43D 75/00      Nailing devices on pulling-over or lasting machines**
- A43D 79/00      Combined heel-pressing and nailing machines**
- A43D 81/00      Machines for attaching top-lifts**
- A43D 83/00      Heel-presses without nailing apparatus**  
**Machines for pressing single lifts or punching holes for nailing**
- A43D 85/00      Machines or apparatus for turning, e.g. for making turn-shoes**
- Guide heading:**
- A43D 86/00      Machines for assembling soles or heels onto uppers, not provided for in groups**  
**[A43D 25/00](#) to [A43D 83/00](#), e.g. by welding**
- Guide heading:**      **Performing finishing operations upon uppers, soles, or heels on soled shoes**  
**Making shoe appurtenances**
- A43D 87/00      Edge or heel cutters**  
**Machines for trimming the heel breast** ([trimming machines for wooden heels B27M](#) ;  
[copying machines B44B](#) )
- A43D 89/00      Sole-levelling machines with rolls**
- A43D 91/00      Stitch-separating or seam-indenting machines**
- A43D 93/00      Edge-indenting machines**
- A43D 95/00      Shoe-finishing machines**
- A43D 95/02
  - . Machines for treating or smoothing shoe uppers to remove wrinkles, folds, or the like
- A43D 95/04
  - . Machines for laying channel-flaps
- A43D 95/06
  - . Machines for colouring or chemical treatment
  - Ornamenting the sole bottoms ([burnishing A43D 95/20](#))
- A43D 95/08
  - . Machines or tools for scouring, abrading, or finishing, with or without dust-separating

suction cleaners for removing dust [A47L 5/00](#); domestic cleaning of footwear [A47L 23/00](#))

- [A43D 95/10](#) . Drying or heating devices for shoes
- [A43D 95/12](#) . Devices for conditioning, tempering, or moistening ([preparatory to pulling-over or lasting A43D 11/14](#))
- [A43D 95/125](#) . . {with means, e.g. transport chains, for continuously transferring shoes through the devices }
- [A43D 95/14](#) . incorporating marking, printing, or embossing apparatus ([ornamentation of shoe part blanks A43D 8/16](#); [printing per se](#) , [stamping per se B41](#) )
- [A43D 95/16](#) . Burnishing tools for shoemaking ([in general B24D](#) )
- [A43D 95/18](#) . . Devices for heating the burnishing tools for shoemaking
- [A43D 95/20](#) . Machines for burnishing soles or heels
- [A43D 95/22](#) . Machines for burnishing the edges of soles, with or without devices for edge-indenting
- [A43D 95/24](#) . Machines for buffing soles
- [A43D 95/26](#) . Devices for applying wax
- [A43D 95/28](#) . Machines for attaching protectors to soles or heels
- [A43D 97/00](#)      Machines for making pulling-on pieces**
- [A43D 98/00](#)      Machines for making laces ([of leather C14B](#) ; [braidings in general D04C](#) )  
Applying fibre or celluloid to ends of laces ([making tags from metal sheet B21D](#) ; [from wire B21F](#) )**
- [A43D 100/00](#)      Setting or removing eyelets, buttons, lacing-hooks, or elastic gussets in shoes**
- [A43D 100/02](#) . Punching and eyelet-setting machines or tools ([for garments in general A41H 37/02](#))
- [A43D 100/04](#) . . inserting invisible eyelets
- [A43D 100/06](#) . . inserting two eyelets simultaneously
- [A43D 100/08](#) . Setting buttons on footwear ([for garments A41H 37/00](#))
- [A43D 100/10](#) . Machines or tools for setting lacing-hooks in shoes
- [A43D 100/12](#) . Machines for inserting elastic gussets in shoes
- [A43D 100/14](#) . Devices for removing buttons, lacing-hooks, or the like from shoes

**Guide heading:**      **Miscellaneous mechanisms for shoemaking**

**A43D 111/00**      **Shoe machines with conveyers for jacked shoes {or for shoes or shoe parts }**

A43D 111/003      . with clamping or gripping mechanism

A43D 111/006      . with special means to place the shoe or shoe part in the following machine

**A43D 113/00**      **Machines for making shoes with out-turned flanges of the uppers or for making moccasins**

**A43D 115/00**      **Machines for skiving or removing heel-lifts, heels, or soles, or for removing stitches, preparatory to repair**

**A43D 117/00**      **Racks for receiving or transporting shoes or shoe parts  
Other conveying means**

**A43D 119/00**      **Driving or controlling mechanisms of shoe machines  
Frames for shoe machines**

**Guide heading:**

**A43D 999/00**      **Subject matter not provided for in other groups of this subclass**

**Guide heading:**

**A43D 2200/00**      **Machines or methods characterised by special features**

A43D 2200/10      . Fully automated machines, i.e. machines working without human intervention

A43D 2200/20      . Machines including a carousel with different working posts around a turning table

A43D 2200/30      . Machines including a magazine, e.g. for feeding blanks, pre-forms or sheets

A43D 2200/40      . Multitool machines, e.g. machines with a plurality of tools or working heads

A43D 2200/50      . Machines using pneumatic means

A43D 2200/60      . Computer aided manufacture of footwear, e.g. CAD or CAM